



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

**Ashim Kumar Ghosh, et al.**

Serial No. 10/675,780

Filed: **September 30, 2003**

For: **Toluene Methylation Process**

Honorable Commissioner of Patents  
and Trademarks  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Examiner:

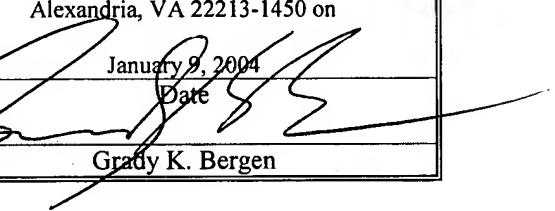
Art Unit: 1754

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Grady K. Bergen



Sir:

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This Information Disclosure Statement is being submitted, along with PTO Form PTO/SB/08A, under 37 C.F.R. § 1.97(b), i.e. within three months of the filing date of the above-referenced application, or before the mailing date of a first Office Action on the merits. Accordingly, consideration of those references listed on the attached PTO Form PTO/SB/08A and enclosed herewith should be given by the Patent Office.

Pursuant to the waiver of the requirement of 37 C.F.R. § 1.98(a)(2)(i) of submitting copies of U.S. patent documents for applications filed after June 30, 2003, which was published in the Official Gazette of August 5, 2003, copies of any listed U.S. patent documents are not enclosed.

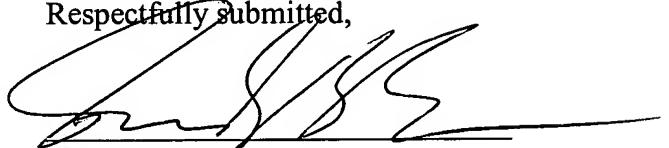
Pursuant to 37 C.F.R. §§ 1.97(g) and (h), this Information Disclosure Statement should not be construed as a representation that a search has been made, or as an admission that the information cited is, or is considered to be, material to the patentability of the invention as defined in 37 C.F.R. § 1.56(b).

No fee is believed to be necessary as the requirements of 37 C.F.R. § 1.97(b) have been met. If any fees are deemed necessary, the Commissioner is hereby authorized to charge them to deposit account No. 50-1899.

Please contact the undersigned at the address or telephone number listed below should there be any questions, or if contacting the undersigned would expedite or aid the examination or prosecution of this application.

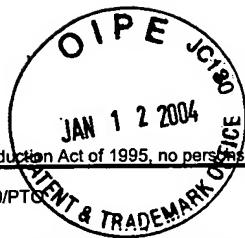
Date: January 9, 2003

Respectfully submitted,



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ATTORNEY FOR APPLICANTS



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STATEMENT BY APPLICANT**

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Sheet

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of 3

Application Number	10/675,780
Filing Date	September 30, 2003
First Named Inventor	Ashim Kumar Ghosh
Art Unit	1754
Examiner Name	

Attorney Docket Number SABI-30145 (STC 03-0008)

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 3,702,886	11-14-1972	Argauer, et al.	
		US- 3,965,207	06-22-1976	Weinstein	
		US- 4,278,827	07-14-1981	Chu, et al.	
		US- 5,210,356	05-11-1993	Shamshoum, et al.	
		US- 5,227,558	07-13-1993	Shamshoum, et al.	
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		US- 5,349,113	09-20-1994	Chang, et al.	
		US- 5,387,732	02-07-1995	Shamshoum, et al.	
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		US- 5,907,073	05-27-1999	Ghosh	
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		US- 5,994,603	11-30-1999	Mohr, et al.	
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		US- 6,222,084B1	04-24-2001	Ghosh, et al.	
		US- 6,268,305B1	07-31-2001	Butler, et al.	
		US- 6,504,072B1	01-07-2003	Brown, et al.	
		US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

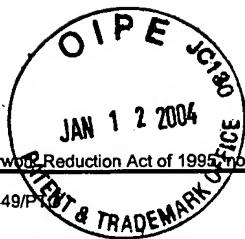
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Application Number	10/675,780
Filing Date	September 30, 2003
First Named Inventor	Ashim Kumar Ghosh
Art Unit	1754
Examiner Name	
Sheet <b>2</b> of <b>3</b>	Attorney Docket Number <b>SABI-30145 (STC 03-0008)</b>

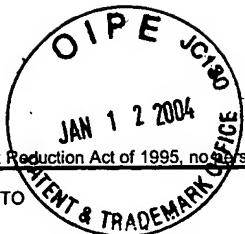
## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AA/	KAEDING, W.W., et al., Selective Alkylation of Toluene to Produce para-Xylene, Journal of Catalysis 67, 1981, pp. 159-174.	
	AB/	HIBINO, T., et al., Shape-Selectivity Over HZSM-5 Modified by Chemical Vapor Deposition of Silicon Alkoxide, Journal of Catalysis 128, 1991, pp. 551-558.	
	AC/	YASHIMA, T., et al., Selective Formation of p-Xylene by Alkylation of Toluene with Methanol on ZSM-5 Type Zeolites, Stud. Surf. Sci. Catal., 1981, 7, pp. 739-751.	
	AD/	SAYED, M. B., et al., The Effect of Modification with Boron on the Catalytic Activity and Selectivity of HZSM-5, Journal of Catalysis 101, 1986, pp. 43-55.	
	AE/	KIM, J.-H, et al., Generation of Shape-Selectivity of p-Xylene Formation in the Synthesized ZSM-5 Zeolites, Journal of Catalysis 173, 1998, pp. 433-439.	
	AF/	VINEK, H., et al., Production and Reactions of Xylenes over H-ZSM-5, Journal of Molecular Catalysis, 64, 1991, pp. 23-39.	
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	AH/	YOUNG, L.B., et al., Shape Selective Reactions with Zeolite Catalysts, Journal of Catalysis 76, 1982, pp. 418-432.	
	AI/	NIRULA, S.C., Para-Xylene From Toluene and Methanol, Process Economics Program, 1983, pp. 1-23, SRI International, Menlo Park, CA.	
	AJ/	WANG, I., et al., Para-selectivity of Diaklybenzenes over Modified HZSM-5 by Vapour Phase Deposition of Silica, Applied Catalysis, 54, 1989, 257-266.	

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	AK	DAS, J., et al., Ethylbenzene Dealkylation and Realkylation over Pore Size Regulated MFI Zeolite, Ind. Eng. Chem. Res., 32, 1993, pp. 2525-2529.	
	AL	KIM, J.-H., et al., Para-selectivity of Metallosilicates with MFI Zeolite Structure Zeolites, Vol. 11, 1991, pp. 59-63.	
	AM	KIM, J.-H., et al., Preparation of Highly Para-selective Metallosilicate Catalysts for Alkylation of Ethylbenzene with Ethanol, Applied Catalysis A:100, 1993, pp. 27-36.	

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